

LISTING OF CLAIMS

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A conductive line structure for a field effect transistor (FET) based magnetic random access memory (MRAM) device, comprising:

- a lower metallization line in a dielectric layer,
- a lateral metal strap conductively coupled to said lower metallization line;
- a magnetic tunnel junction (MTJ) stack formed on said metal strap;
- a metal hardmask layer formed atop said MTJ stack;
- a metal shield formed over said metal hardmask layer, said metal shield being substantially coextensive with said metal strap; and
- an upper metallization line conductively coupled to said metal shield, wherein said metal shield serves as an etch stop during the formation of said upper metallization line.

2. (Previously presented) The structure of claim 1, wherein said MTJ stack further comprises:

- a non-magnetic layer formed between a lower magnetic layer and an upper magnetic layer,
- wherein the distance between said upper metallization line and said upper magnetic layer is defined by a total thickness of said metal hardmask layer and said metal shield.

3. (Original) The structure of claim 2, wherein said total thickness of said metal hardmask layer and said metal shield is about 400 to about 500 angstroms.

4. (Original) The structure of claim 1, wherein said metal shield comprises one of: tantalum, tantalum nitride, titanium nitride, tungsten, platinum, and combinations comprising at least one of the foregoing.

5. (Original) The structure of claim 1, wherein said metal hardmask layer and said metal strap comprise one of: tantalum, tantalum nitride, titanium nitride, tungsten, platinum, and combinations comprising at least one of the foregoing.

6. (Original) The structure of claim 1, wherein: said lower metallization line is formed at first metallization level (M1) of the MRAM device, and said upper metallization line is formed at a second metallization level (M2) of the MRAM device.

7. (Original) The structure of claim 1, further comprising:

a wordline formed at a lower metallization level (M1) and adjacent said lower metallization line, said wordline electrically insulated from said lateral metal strap, and said wordline disposed below said MTJ stack;

wherein said upper metallization line comprises a bitline of an individual MRAM cell, said cell also including said MTJ stack and said wordline.

8 – 15. (Canceled)

16. (Previously presented) The structure of claim 1 wherein said magnetic tunnel junction stack is not coextensive with said metal strap.